

JEE 696 Greenhouse gas Measurement, Monitoring and Accounting
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Wk	Topic	Expected outcome	Instructor
1 (16Aug)	Greenhouse gas emission, global warming and climate change	Understand the objectives and expected outcomes of the course, big picture of climate change and how the knowledge gain from the class fits into that big picture of climate change	AC
2 (23Aug)	Climate change policy, greenhouse gas emission and reduction targets (UNFCCC, IPCC, and related international agreements)	Understand the mechanism and aims that the world community are using to drive cooperation towards emission mitigation	AC
3 (30Aug)	Overview principle of greenhouse gas measurements, monitoring and reporting (IPCC vs. Life cycle GHG inventory methodology)	Understand the principle of measurement, estimate, and reporting of greenhouse gas at different levels (project, national, and global)	AC
4 (6Sept)	Energy sector I	Understand and able to apply the methodology to measure and estimate greenhouse gas emission from sources in energy sector	AP
5 (13Sept)	Energy sector II		AP
6 (20Sept)	Energy sector III		AP
7 (27Sept)	Waste sector I	Understand and able to apply the methodology to measure and estimate greenhouse gas emission from sources in waste sector	KW/Sirin
8 (4Oct)	Waste sector II		KW/Sirin
11Oct	Midterm exam		
9 (18Oct)	Industrial process sector	Identify key source and how to estimate greenhouse emission from those sources of IPPU	AC/Invited
10 (25Oct)	Land use overview	1. Understand and pick up the appropriate method to estimate greenhouse gas emission from sources and removal by sink in Agri and LUCF 2. Demonstrate the ability to collect data or information, convert them into information suitable for greenhouse inventory 3. Familiarize oneself with the scientific equipment/sensors for taking gas samples, analyze the gas in AFOLU sector	AC
11 (1Nov)	Agriculture		KY
12 (8Nov)	Eddy covariance basic		AC
13 (15Nov)	Eddy covariance hand-on		AC
14 (22Nov)	Eddy covariance hand-on		AC
15 (29Nov)	Field work at Ratchaburi-chamber method		AC
16 (6Dec)	Field work at Ratchaburi eddy covariance tower		AC
13Dec	Final Exam		